

**Amendments to the Claims**

1. (*Currently Amended*) An electronic circuit for amplification of a bipolar current signal (I<sub>in</sub>), the electronic circuit comprising a pair of complementary current mirrors (202, 204), the current mirrors being interconnected at an input terminal (206) and at an output terminal (208), wherein a first complementary current mirror (204) of the pair of complementary current mirrors is active when a positive current signal is applied and wherein the second complementary current mirror (202) of the pair of complementary current mirrors is active when a negative current signal is applied at the input terminal.
2. (*Original*) The electronic circuit of claim 1, wherein the first current mirror is a PNP current mirror and the second current mirror is a NPN current mirror.
3. (*Currently Amended*) The electronic circuit ~~of claims 1 or 2,~~ of claim 1, further comprising bypass capacitors (C1, C2, C3, C4) being coupled to the first and second current mirrors.
4. (*Currently Amended*) The electronic circuit ~~of claims 1, 2 or 3 of claim 1,~~ further comprising a pair of degeneration resistors (R1, R3; R2, R4) for each one of the first and second current mirrors.
5. (*Currently Amended*) The electronic circuit ~~of any one of the preceding claims 1 to 4,~~ of claim 1, further comprising a feedback transistor (M1), a control terminal of the feedback transistor being coupled to the input terminal.
6. (*Original*) The electronic circuit of claim 5, the feedback transistor being an NMOS-type transistor.
7. (*Original*) The electronic circuit of claim 5, the feedback transistor being an NPN-type transistor.

8. (*Currently Amended*) The electronic circuit of ~~any one of the preceding claims 1 to 7~~, of claim 1, further comprising a resistor (210) being coupled to the input terminal for providing a bipolar voltage signal input terminal.

9. (*Currently Amended*) An ultrasound apparatus comprising:

[[ - ]] an ultrasound receiver (214) for providing an ultrasound bipolar current signal,  
[[ - ]] a pair (200) of ~~complimentary~~ complementary current mirrors, the current mirrors being interconnected at a first terminal and at a second terminal, the first terminal being coupled to the ultrasound receiver for receiving the ultrasound bipolar current signal,

wherein a first current mirror of the pair of ~~complimentary~~ complementary current mirrors is active during a positive swing of the ultrasound bipolar current signal while a second current mirror of the pair of ~~complimentary~~ complementary current mirrors is off, and wherein the second current mirror is active during a negative signal swing of the ultrasound bipolar current signal while the first current mirror is off.